

**REMARKS**

**Summary of the Office Action**

Claims 1-3, 5-8, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Related Art in view of Somer (US 6,052,362) and Chung (US 6,363,067).

Claims 10, 11, 14, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Related Art in view of Somer.

The Specification is objected to for minor informalities.

The drawings are objected to because FIG. 5 includes a descriptor not described in the specification.

Applicant wishes to thank the Examiner for indication that claims 4, 9, 12, 13, 17, 18, and 20 contain allowable subject matter.

**Summary of the Response to the Office Action**

Applicant has amended the specification, and canceled claims 11 and 15. Accordingly, claims 1-10, 12-14, and 16-20 are pending for further consideration.

Applicant concurrently submits herewith a Submission of Replacement Drawings.

**Objection to the Specification**

The Specification is objected to for minor informalities. Accordingly, Applicant has amended the specification in accordance with the Examiner's suggestions. Thus, Applicant respectfully requests that the objections to the Specification be withdrawn.

**Objection to the Drawings**

The drawings are objected to because FIG. 5 includes a descriptor not described in the specification. Accordingly, Applicant concurrently submits herewith a Submission of

Replacement Drawings that includes amendments made to FIG. 5. Specifically, FIG. 5 has been amended to remove the descriptor “Loop.” Thus, Applicant respectfully submits that the objection to the drawings is rendered moot.

**All Claims Define Allowable Subject Matter**

Claims 1-3, 5-8, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant’s Admitted Related Art in view of Somer (US 6,052,362) and Chung (US 6,363,067), and claims 10, 11, 14, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant’s Admitted Related Art in view of Somer. Applicant respectfully traverses these rejections as being based upon references that neither teach nor suggest each feature recited in independent claims 1, 10, and 16, and hence dependent claims 2-9, 12-14, and 17-20.

Independent claim 1 recites a loop test apparatus of a packet routing bus including “a transmitting bus master including a register for storing an address of one of the transmitting node and receiving node for managing a transfer of the data packet on a transmitting packet routing bus” and “a receiving bus master including a register for storing an address of one of the transmitting node and receiving node for managing a transfer of the data packet on a receiving packet routing bus.” The Office Action alleges that the combination of Applicant’s Admitted Related Art and Somer teach all the features of claim 1, except for “the registers in the transmitting and receiving bus masters.” Thus, the Office Action relies upon Chung for allegedly teaching (col. 13, lines 59-63) these features, and concludes that “motivation for doing so would be to assist in the directing of packets as suggested by Chung in line 62 of column 13.” Applicant respectfully disagrees.

Applicant respectfully submits that Chung actually teaches (col. 13, lines 13-65, and in FIG. 9) using Look-up Tables 408 written into registers by a bus controller 426 for routing packet data. Moreover, Applicant respectfully asserts that Chung is completely silent with respect to “a transmitting bus master including a register for storing an address of one of the transmitting node and receiving node for managing a transfer of the data packet on a transmitting packet routing bus” and “a receiving bus master including a register for storing an address of one of the transmitting node and receiving node for managing a transfer of the data packet on a receiving packet routing bus,” as recited by independent claim 1, and hence dependent claims 2-9.

Independent claim 10 recites a loop test method of a packet routing bus including, in part, steps of “writing a test data packet for routing in a receiving node to a test node for testing by a testing element,” and “routing the test data packet to the receiving driver of the test node by the transmitting bus master.” Similarly, independent claim 16 recites a loop test method of a packet routing bus including, in part, steps of “writing a test data packet for routing in a transmitting node to a test node for testing by a testing element,” and “routing the test data packet of the U-turn node to the test node by the transmitting bus master.”

The Office Action alleges that Applicant’s Admitted Related Art discloses the features of claim 10 except for “writing a test data packet for routing in a receiving node to a test node for testing by a test element and the limitation of looping the test data packet.” Furthermore, the Office Action alleges that Applicant’s Admitted Related Art discloses the features of claim 16 except for “writing a test data packet to a test node by a testing element.” Thus, the Office Action relies upon Somer for allegedly teaching (col. 9, lines 12-16) writing and routing a test data packet, and for allegedly teaching (col. 4, line 66 to col. 5, line 4, and in

FIG. 2) a loopback mode, and concludes that “motivation for doing so would be to test the communication system.” Applicant respectfully disagrees.

Applicant respectfully submits that Somer actually teaches an ethernet communication device that generates and checks a test packet once the test packet has been transmitted through a loopback path within the ethernet communication device. According to Somer, a repeater is used for transmitting data from one port to another port, wherein the data must pass through a repeater core of the repeater. Thus, when each port of the repeater has data to be transmitted, an ethernet repeater sends a carrier first according to a CSMA/CD method. Then, if there is no clash between the data, each port transmits the data.

In contrast to Applicant’s claimed invention, Somer teaches that if more than one data packet is detected by the repeater core logic, then the repeater disregards all but one of the data packets. According to Applicant’s invention, it is possible to test each node while the network is in operation, whereas Somer teaches that it is impossible for other nodes to operate in an on-line state while the test nodes are in operation. Thus, Applicant respectfully submits that Somer fails to remedy the deficiencies of Applicant’s Admitted Related Art with respect to independent claims 10 and 16, and hence dependent claims 12-14 and 17-20.

For at least the above reasons, Applicant respectfully submits that independent claims 1, 10, and 16 are neither taught nor suggested by Applicant’s Admitted Related Art, Somer, and/or Chung, whether taken alone or in combination. Thus, Applicant respectfully asserts that the rejections under 35 U.S.C. § 103(a) should be withdrawn because the above-discussed novel combination of features are neither taught nor suggested by any of the applied references.

**Conclusion**

In view of the foregoing amendments and remarks, Applicant respectfully requests entry of the above amendments, reconsideration, and the timely allowance of the pending claims. Should the Examiner believe that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicant's undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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